



SUMMARY OF THE TENTH SESSION OF THE FCCC SUBSIDIARY BODIES: 31 MAY – 11 JUNE 1999

The subsidiary bodies to the UN Framework Convention on Climate Change (FCCC) held their tenth sessions at the Maritim Hotel in Bonn, Germany, from 31 May - 11 June 1999, and began the process of fulfilling the Buenos Aires Plan of Action, which was adopted at the Fourth Conference of the Parties (COP-4) in November 1998. Under the Plan of Action, Parties set a two-year deadline for strengthening implementation of the FCCC and preparing for the future entry into force of the Kyoto Protocol. The Subsidiary Body for Scientific and Technological Advice (SBSTA) considered topics such as Annex I communications, methodological issues and the development and transfer of technology. The Subsidiary Body for Implementation (SBI) discussed, *inter alia*, administrative and financial matters and non-Annex I communications. SBI and SBSTA jointly considered the mechanisms of the Kyoto Protocol, activities implemented jointly and compliance.

After a slow start, work at the subsidiary bodies picked up during the latter part of the second week. Delegates clarified their positions on the Kyoto Protocol mechanisms and agreed that a new synthesis document should be prepared. Progress was also made on compliance. Difficulties remained in a number of methodological debates and on proposals for an expanded biennium budget from the FCCC Executive Secretary. The sessions were punctuated by a series of three bomb scares resulting in evacuations from the Maritim Hotel.

A BRIEF HISTORY OF THE FCCC AND THE KYOTO PROTOCOL

The FCCC was adopted on 9 May 1992, and was opened for signature at the UN Conference on Environment and Development in June 1992. The Convention entered into force on 21 March 1994, 90 days after receipt of the 50th ratification. To date, it has been ratified by 177 countries.

COP-1: The first meeting of the Conference of the Parties to the FCCC (COP-1) took place in Berlin from 28 March - 7 April 1995. In addition to addressing a number of important issues related to the future of the Convention, delegates reached agreement on what many

believed to be the central issue before COP-1 — adequacy of commitments, the "Berlin Mandate." The result was to establish an open-ended *Ad Hoc* Group on the Berlin Mandate (AGBM) to begin a process toward appropriate action for the period beyond 2000, including the strengthening of the commitments of Annex I Parties through the adoption of a protocol or another legal instrument.

COP-1 also requested the Secretariat to arrange for sessions of SBSTA and SBI. SBSTA was established to serve as the link between the information provided by competent international bodies and the policy-oriented needs of the COP. During the AGBM process, SBSTA addressed several issues, including the treatment of the Intergovernmental Panel on Climate Change's (IPCC) Second Assessment Report (SAR). SBI was created to develop recommendations to assist the COP in the review and assessment of the implementation of the Convention and in the preparation and implementation of its decisions. SBI also addressed several key issues during the AGBM process, such as national communications and activities implemented jointly.

The *Ad Hoc* Group on Article 13 (AG13) was set up to consider the establishment of a multilateral consultative process (MCP) available to Parties to resolve questions on implementation. AG13-1, held from 30-31 October 1995 in Geneva, decided to request Parties, non-Parties, and intergovernmental and non-governmental organizations

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to make written submissions in response to a questionnaire on an MCP. Delegates continued their discussion over the course of the next three meetings. At their fifth session, they agreed that the MCP should be advisory rather than supervisory in nature and AG13 should complete its work by COP-4.

AD HOC GROUP ON THE BERLIN MANDATE: The AGBM met eight times between August 1995 and COP-3 in December 1997. During the first three sessions, delegates focused on analyzing and assessing possible policies and measures to strengthen the commitments of Annex I Parties, how Annex I countries might distribute or share new commitments and whether commitments should take the form of an amendment or protocol. AGBM-4, which coincided with COP-2 in Geneva in July 1996, completed its in-depth analysis of the likely elements of a protocol, and States appeared ready to prepare a negotiating text. At AGBM-5 in December 1996, delegates recognized the need to decide whether to allow mechanisms that would provide Annex I Parties with flexibility in meeting quantified emissions limitation and reduction objectives (QELROs).

As the protocol was drafted during the sixth and seventh sessions of the AGBM, in March and August 1997, respectively, delegates "streamlined" a framework compilation text by merging or eliminating some overlapping provisions within the myriad of proposals. Much of the discussion centered on a proposal from the EU for a 15% cut in a "basket" of three greenhouse gases (GHGs) by the year 2010 as compared to 1990 levels. In October 1997, as AGBM-8 began, US President Bill Clinton called for "meaningful participation" by developing countries in the negotiating position he announced in Washington. With those words, the debates that shaped agreement back in 1995 resurfaced, with an insistence on G-77/China involvement once again linked to the level of ambition acceptable by the US. In response, the G-77/China distanced itself from attempts to draw developing countries into agreeing to anything that could be interpreted as new commitments.

COP-3: COP-3 was held from 1-11 December 1997 in Kyoto, Japan. Over 10,000 participants, including representatives from governments, intergovernmental organizations, NGOs and the media, attended the Conference, which included a high-level segment featuring statements from over 125 ministers. Following a week and a half of intense formal and informal negotiations, including a session that began on the final evening and lasted into the following day, Parties to the FCCC adopted the Kyoto Protocol on 11 December. In the Kyoto Protocol, Annex I Parties to the FCCC agreed to commitments to reduce their overall emissions of six GHGs by at least 5% below 1990 levels between 2008 and 2012. The Protocol also established emissions trading, "joint implementation" (JI) between developed countries, and a "clean development mechanism" (CDM) to encourage joint emissions reduction projects between developed and developing countries. The Protocol will enter into force after 55 Parties, including Annex I countries that account in total for at least 55% of carbon dioxide emissions for 1990, have ratified it. To date, 84 countries have signed and nine have ratified the Kyoto Protocol.

POST-KYOTO FCCC MEETINGS: The subsidiary bodies of the FCCC met from 2-12 June 1998 in Bonn. SBSTA-8 agreed to draft conclusions on, *inter alia*, cooperation with relevant international organizations, methodological issues, and education and training. SBI-8 reached conclusions on, *inter alia*, national communications, the financial mechanism and the second review of adequacy of Annex I Party commitments. In its sixth session, AG13 concluded its work on the MCP's functions. After joint SBI/SBSTA consideration and extensive contact group debates on the flexibility mechanisms, delegates

could only agree to a compilation document containing proposals from the G-77/China, the EU and the US on the issues for discussion and frameworks for implementation.

COP-4: The Fourth Conference of the Parties (COP-4) was held from 2-13 November 1998 in Buenos Aires, Argentina, and was attended by over 5,000 participants. During the two-week meeting, delegates deliberated decisions for the COP during SBI-9 and SBSTA-9. Issues related to the Kyoto Protocol were considered in joint SBI/SBSTA sessions. A high-level segment, which heard statements from over 100 ministers and heads of delegation, was convened on Thursday, 12 November. Following hours of high-level "closed door" negotiations and a final plenary session that concluded early Saturday morning, delegates adopted the Buenos Aires Plan of Action. Under the Plan of Action, the Parties declared their determination to strengthen the implementation of the Convention and prepare for the future entry into force of the Kyoto Protocol. The Plan contains the Parties' resolution to demonstrate substantial progress on: the financial mechanism; the development and transfer of technology; the implementation of FCCC Articles 4.8 and 4.9 (adverse effects), as well as Protocol Articles 2.3 and 3.14 (adverse effects); activities implemented jointly (AIJ); the mechanisms of the Kyoto Protocol; and the preparations for the first meeting of the Parties (COP/MOP-1).

SUBSIDIARY BODY FOR SCIENTIFIC AND TECHNOLOGICAL ADVICE (SBSTA)

SBSTA Chair Kok Kee Chow (Malaysia) opened the first meeting on Monday, 31 May 1999, and introduced the agenda (FCCC/SBSTA/1999/1). He emphasized SBSTA's role in ensuring that the Buenos Aires Plan of Action's goals are met. He drew attention to the election at COP-4 of Lambert Gnapelet (Central African Republic) as SBSTA Vice Chair and Andrej Kranjc (Slovenia) as Rapporteur. In his opening statement to both subsidiary bodies, FCCC Executive Secretary Michael Zammit Cutajar emphasized COP-5's importance as a potential "stepping stone" to produce outcomes that strengthen and maintain national capacities for developing countries and countries with economies in transition. He said the subsidiary body sessions should identify the goals of COP-5 and the meetings and workshops required to help implement COP-6's objectives.

SBSTA considered: cooperation with relevant international organizations; Annex I communications; methodological issues; FCCC Article 6 (education, training and public awareness); development and transfer of technologies; research and systematic observation; and implementation of FCCC Articles 4.8 and 4.9 (adverse effects). During the course of the two weeks, contact groups and informal consultations were convened for some agenda items following discussion in plenary.

COOPERATION WITH RELEVANT INTERNATIONAL ORGANIZATIONS

Delegates considered cooperation with relevant scientific organizations on Monday, 31 May. IPCC Chair Robert Watson noted that the IPCC has its most intense work programme ever, largely in response to requests from SBSTA and the FCCC, and said it faces a significant budget problem that will require more funding from governments. He noted the IPCC's acceptance of the Special Report on "Aviation and the Global Atmosphere," as well as the list of Policy-relevant Scientific Questions that will be addressed in the Synthesis Report of the Third Assessment Report (TAR). He also noted significant progress on preparation of the TAR. Several delegates called for steps to resolve the IPCC's funding problems.



On cooperation with other UN bodies, the Secretariat drew attention to collaboration with UNCTAD, UNDP, UNEP and UNIDO. UNEP said it had been collaborating with the FCCC Secretariat on a capacity-building project relating to the CDM and directed at developing countries and countries with economies in transition. A number of delegates called for an elaboration of what capacity building means. They stressed the need to strengthen national capacities and widen the scope of future efforts beyond the Protocol mechanisms.

On cooperation with other conventions, Chair Chow emphasized cooperation with the Convention to Combat Desertification (CCD) and the Convention on Biological Diversity (CBD). Gregoire de Kalbermatten, CCD Secretariat, said that as the issues addressed by FCCC, CCD and CBD are intimately connected, initiatives to build stronger links should be encouraged. He stated that the benefits of inter-convention synergies would not be fully realized as long as resources were lacking, particularly in developing countries. Kalemuni Mulongoy, CBD Secretariat, highlighted areas where SBSTA-10 could assist the CBD's work programme, including: considering the best modalities to address coral bleaching; furthering the understanding of forest biodiversity and climate change interactions; and contributing climate-related information to the CBD's work on education and public awareness.

Delegates adopted the conclusions on cooperation with relevant international organizations (FCCC/SBSTA/1999/L.7) on Thursday, 10 June. In its conclusions, SBSTA noted the IPCC's need for sufficient resources to prepare special reports on methodological and technological issues in technology transfer, emissions scenarios of greenhouse gases and aerosol precursors, land use, land-use change and forestry, as well as on good practices in inventory management. It noted the relevant activities in other UN bodies and encouraged the Secretariat to continue drawing upon the contributions of the other bodies for the development of a joint project on capacity building. It requested the Secretariat to make further information available for consideration at SBSTA-11 and continue to explore with other UN partner organizations areas where their expertise and resources could support the work programmes under the Convention process.

Regarding cooperation with other conventions, SBSTA noted the substantive linkages between the FCCC and the CBD and CCD and welcomed efforts to explore ways of cooperating with the other conventions' secretariats in order to strengthen cooperation on issues of common interest.

NATIONAL COMMUNICATIONS FROM PARTIES INCLUDED IN ANNEX I TO THE CONVENTION

On Tuesday, 1 June, SBSTA considered national communications from Annex I Parties, including guidelines for the preparation of national communications, the review process related to greenhouse gas inventories, and the work programme on methodological issues related to Protocol Articles 5 (methodology), 7 (communications) and 8 (review of information).

GUIDELINES FOR THE PREPARATION OF NATIONAL COMMUNICATIONS: On guidelines for national communications, the IPCC noted its recent work to improve guidelines for national inventory preparation. AUSTRALIA called for separate development of guidelines for national communications inventory data. NORWAY said more experience on the use of guidelines was necessary before a final decision is taken. The EU and JAPAN supported a common reporting format (CRF) proposed for inventory data guidelines. The US cautioned against overly prescriptive guidelines. CANADA stressed substance, not timing, as the most important consideration and, with POLAND, said it is impractical for Parties to report on all

climate change-related policies and measures. RUSSIA opposed Canada's suggestion for an annual system of providing inventories, as it would be costly and difficult.

A contact group, co-chaired by Jim Penman (UK) and Mark Mwandosya (Tanzania), was convened to consider this issue further. The group held nine meetings from 2-11 June, and considered guidelines for inventory and non-inventory reporting, the draft decisions and conclusions on these guidelines, draft conclusions on the review process related to greenhouse gas inventories, and draft conclusions on a work programme on methodological issues related to Protocol Articles 5, 7 and 8. The group negotiated text for all relevant documents for consideration by SBSTA, except in the case of the non-inventory part of the guidelines, where it did not complete its deliberations.

On Thursday, 10 June, SBSTA considered the Chair's draft conclusions and a draft decision for the COP on guidelines for the preparation of national communications (FCCC/SBSTA/1999/L.5 and Add.1). Chair Chow informed delegates that discussion on the non-inventory part of the guidelines relating to projections, policies and measures, financial resources and transfer of technology, and other matters, was not concluded in the contact group convened at this session, and will continue at SBSTA-11.

In a section of the draft conclusions requesting Parties not using the common reporting format for certain sectoral background data tables on land use, land-use change and forestry to specify alternative formats, CHINA added a specific reference noting that this request included Annex I Parties. On the proposed title for the non-inventory part of the guidelines, the EU suggested shortening it to read "UNFCCC reporting guidelines on national reports," as agreed in the contact group. ANTIGUA AND BARBUDA said the title should not be amended until consideration of the content had been completed. Delegates agreed to retain the current title but with a note that it will be subject to further discussion at the next session. Delegates adopted the draft conclusions, as amended, and the draft decision for the COP. Chair Chow noted that they will be forwarded to SBI for its consideration.

The Chair's conclusions on guidelines for national communications (FCCC/SBSTA/1999/L.5), *inter alia*, noted that SBSTA: advised the SBI to set up a two-year trial period starting in early 2000 to assess FCCC reporting guidelines on annual inventories, with a view to revising it at COP-7; requested the IPCC to provide its report on work uncertainties and good practices in time for consideration at SBSTA-12; decided to continue discussions on revisions to the non-inventory part of the guidelines at SBSTA-11; and requested the Secretariat to prepare a document reflecting the state of discussions at the close of SBSTA-10.

The draft decision, annexed to the conclusions, recommends that the COP, *inter alia*: adopt the guidelines on inventories; instruct Annex I Parties to use the inventory guidelines for reporting inventories due by 15 April each year, beginning in 2000; invite Parties to submit separately to the Secretariat, by 1 July 2001, information on experiences using the guidelines during 2000-2001, particularly in relation to the CRF; request the Secretariat to prepare a report on the guidelines for consideration at SBSTA-15; and consider revisions to the guidelines at SBSTA-15 for a decision at COP-7. The guidelines, including the common reporting format (CRF), are contained in an annex to the draft decision.

REVIEW PROCESS RELATED TO GREENHOUSE GAS INVENTORIES: On Tuesday, 1 June, SBSTA considered the review process related to greenhouse gas inventories. POLAND noted that if Parties decide to change inventory methodology, artificial reduction of



emissions may occur, and proposed recalculating emissions whenever the COP adopts new or amended emissions inventory methodology. The contact group that convened to consider the guidelines for Annex I communications also deliberated on the review process related to greenhouse gas inventories work programme, on Friday, 4 June, and negotiated text for the draft conclusions.

On Wednesday, 9 June, SBSTA adopted the draft conclusions on the review process relating to greenhouse gas inventories (FCCC/SBSTA/1999/L.4). In its conclusions, SBSTA endorsed elements of the FCCC technical review process, including the annual initial checks, annual synthesis and assessment and individual reviews, and advised SBI to consider guidelines for a technical review at its eleventh session.

WORK PROGRAMME ON METHODOLOGICAL ISSUES RELATED TO PROTOCOL ARTICLES 5, 7 AND 8:

On Tuesday, 1 June, SBSTA considered the work programme on methodological issues under Protocol Articles 5 (methodological issues), 7 (communication of information) and 8 (review of information). The EU said early completion of the work programme should be followed by a testing period to guarantee gradual refinement of guidelines and modalities. CANADA underscored the importance of developing realistic review guidelines and, with the US, called for a more streamlined approach. AUSTRALIA emphasized defining realistic objectives for COP-6 and maintaining a clear sense of the different requirements of the Convention and the Protocol. The joint SBSTA/SBI contact group that considered Annex I communications, also deliberated on the work programme and the drafted Chair's conclusions on this issue.

SBSTA considered the draft conclusions on the work programme on methodological issues (FCCC/SBSTA/1999/L.3) on Tuesday, 8 June. The EU requested changing the date of submission from 15 August to 15 September to allow time for preparation. Chair Chow said the current deadline meant Parties could receive the compiled views prior to COP-5. Delegates adopted the draft conclusions without amendment.

The conclusions noted, *inter alia*, that the SBSTA: broadly endorsed the work programme contained in document FCCC/SBSTA/1999/2, noting that some aspects relating to Protocol Article 3 (QELROs) may require further discussion in relation to Protocol Articles 5, 7 and 8; decided to consider the characteristics of national systems and issues relating to adjustments at SBSTA-11, with a request for Parties to provide views by 15 August 1999; and requested that the Secretariat organize a workshop on methodology prior to SBSTA-12, and develop plans for a workshop on Protocol Articles 5, 7 and 8.

METHODOLOGICAL ISSUES

LAND USE, LAND-USE CHANGE AND FORESTRY:

SBSTA considered land use, land-use change and forestry (LULUCF) on Tuesday and Wednesday, 1-2 June. Paul Maclons (South Africa), Co-Chair of a SBSTA workshop held in Indianapolis in April 1999, reported on the workshop, which focused on other land use activities. IPCC Chair Robert Watson outlined a Special Report being prepared on LULUCF. Key issues to be addressed include, *inter alia*: the implications of different definitions, including "forests," "afforestation," "deforestation" and "reforestation;" the question of which carbon pools should be considered when evaluating implications for relevant net carbon emissions; the accuracy of measurements for each type of carbon pool; and the factors to be used in setting baselines. The MARSHALL ISLANDS said no new sink categories should be adopted until accounting difficulties have been resolved.

AUSTRALIA called for focus on key policy and procedural issues relevant to the negotiating process. The EU stressed the need for clear definitions of terms and for work on the eligibility of additional activities between now and COP-6. The US stressed making timely decisions on LULUCF. SAUDI ARABIA, SWITZERLAND, GREENPEACE and others expressed reservations about the proposed timing for deliberation on some issues, noting the relevance of the Special Report.

A contact group, co-chaired by Paul Maclons (South Africa) and Maciej Sadowski (Poland), was convened to consider policy and procedural issues relating to LULUCF. The group met six times from 2-9 June to develop and negotiate draft conclusions on methodological issues relating to LULUCF. With participants in general agreement that many decisions must await SBSTA's consideration of the relevant IPCC Special Report due in May 2000, discussions on the text focused primarily on issues of timing and procedure. After protracted negotiations, the group concluded its work on Wednesday, 9 June, adopting the draft conclusions.

The draft conclusions were considered by SBSTA on Thursday, 10 June. ANTIGUA AND BARBUDA questioned a sentence he said could be interpreted as signaling that substantive decision-making on LULUCF will take place at SBSTA-11. After lengthy discussions, delegates agreed to delete the text that some delegations said was ambiguous. The draft conclusions were adopted, as amended.

In its conclusions (FCCC/SBSTA/1999/L.9), SBSTA invited Parties to review and, where possible, respond to questions posed in tables 1 and 2 of its document on LULUCF and policy and procedural issues (FCCC/SBSTA/1999/5), and to identify any additional related issues. It requested Parties to provide submissions by 16 August 1999 for compilation into a miscellaneous document that can be considered at SBSTA-11. It also:

- invited IPCC to provide an in-depth progress report and convene a special side event on its draft Special Report on LULUCF at SBSTA-11;
- decided to further consider the process and timing for analysis of the IPCC report, and the process of developing its LULUCF work programme at SBSTA-11;
- requested the Secretariat to organize a workshop, to be held between SBSTA-12 and COP-6, to analyze the Special Report, and invited Parties to provide guidance to the Secretariat on the workshop's scope;
- invited the IPCC to develop a work plan addressing methodological issues raised in its upcoming report, once the report is completed; and,
- decided to start consideration at SBSTA-11 on the need for country-specific data and information and its relationship to a decision-making framework in the context of the Protocol requirements, and requested submissions on this from Parties.

EMISSIONS RESULTING FROM FUEL USED FOR INTERNATIONAL TRANSPORTATION: On Tuesday, 2 June, the Secretariat reported to SBSTA that the International Maritime Organization (IMO) is currently considering a study on emissions from ships to develop an internationally accepted policy document. The International Civil Aviation Organization (ICAO) presented an overview of technology and standards, operational measures and market-based options aimed at providing a technical and policy basis for decisions to limit bunker emissions. SWITZERLAND stressed the need to introduce more stringent regulations, improve air traffic management



nationally and internationally and use economic instruments such as eliminating tax privileges on aviation fuel. SAUDI ARABIA said the use of market-based mechanisms would burden developing countries.

Regarding reporting of bunker emissions, the EU proposed that any decision on their inclusion in national inventories should be applied in the second commitment period. The US preferred treating bunker emissions separately from national inventories, which the EU said results in no direct incentives to limit or reduce bunker emissions. The REPUBLIC OF KOREA called for further clarification in defining international bunker fuels.

On allocation of bunker emissions, AUSTRALIA highlighted the need to establish a policy framework and adopt the most suitable method of recording emissions. Stating that this is a complicated process, JAPAN called on ICAO and IMO to provide the information necessary to help identify possible solutions. The EU said it would be practical to include bunker fuel emissions in inventories of Parties where the fuel is sold.

José Romero (Switzerland) conducted informal consultations on the Chair's draft conclusions. Delegates adopted these conclusions (FCCC/SBSTA/1999/L.8) on Friday, 11 June. In its conclusions, SBSTA noted the need for further methodological work to ensure consistent and transparent inventories and invited Annex I Parties to provide emission data and information on methods used as part of their annual greenhouse gas inventory. It also, *inter alia*: requested Parties to provide comments on the informal paper prepared by the Secretariat on methods used to collect data and estimate and report emissions from international bunker fuels; invited the Secretariat to explore ways of strengthening information exchange between ICAO, IMO and SBSTA; and decided to continue its work to elaborate inclusion of bunker fuel emissions in overall greenhouse gas emissions inventories.

OTHER MATTERS ON METHODOLOGICAL ISSUES

Delegates considered other matters on methodological issues on Wednesday, 2 June. UNEP outlined its recent work on impacts, adaptation and mitigation assessment methodologies, including provision of guidance for national strategy development and capacity building on GHG abatement. TANZANIA suggested establishing FCCC collaborating centers in developing countries for information purposes and capacity building. UGANDA supported regional capacity building and South-South sharing of expertise. BRAZIL reported on a recent workshop held to consider its proposal on determining responsibility based on historical emissions. He noted that the proposal would be on SBSTA-11's agenda.

Delegates adopted the conclusions on this item (FCCC/SBSTA/1999/L.6) on Wednesday, 9 June, which encouraged UNEP and other relevant institutions to review their activities to support capacity building in methodologies for impacts, adaptation and mitigation assessment. SBSTA decided to consider the proposal by Brazil at SBSTA-11 and invited Brazil to provide other relevant information.

On Friday, 11 June, ARGENTINA raised the issue of the use of hydrofluorocarbons (HFCs) in metered dose inhalers for asthma treatment. She noted that whereas the Kyoto Protocol determined that HFCs have a thermoactive quality and has included them as compounds that contribute to global warming, the Montreal Protocol has identified them as a substitute for ozone-depleting chlorofluorocarbons. She urged SBSTA to consider the issue in future sessions. SBSTA decided to consider this issue at SBSTA-11.

NEW ZEALAND introduced a proposed draft conclusion on inventory and methodological issues relating to harvested wood products that invites Parties to submit their views on harvested wood prod-

ucts and requests the Secretariat to compile these submissions into a miscellaneous document for preliminary consideration at SBSTA-11. SBSTA deferred discussions on this issue to SBSTA-11.

EDUCATION, TRAINING AND PUBLIC AWARENESS

Education, training and public awareness was considered on Monday, 31 May. Chair Chow noted that only three submissions had been received from Parties on possible means of promoting the implementation of FCCC Article 6 (Education, training and public awareness). The Secretariat was unable to formulate proposals on ways to integrate this issue into SBSTA's work programme. He proposed setting a new date for submissions. The EU suggested further pursuing education, training and public awareness in the work on good practices in policies and measures. He called on the Secretariat to advise on the likely costs of undertaking further work on these issues. The REPUBLIC OF KOREA noted the need for a technical guide to support developing countries and welcomed the private sector participation in promoting awareness activities. Parties were invited to submit further proposals to the Secretariat by 15 October 1999 to serve as a basis for more substantive discussions at SBSTA-12.

DEVELOPMENT AND TRANSFER OF TECHNOLOGY

Delegates discussed the development and transfer of technology on Wednesday, Thursday and Friday, 2-4 June. The IPCC reported on the status of the forthcoming Special Report on Methodological and Technological Issues in Technology Transfer that will present a broad conceptual framework on the complexities of technology transfer and illuminate the role of governments and other stakeholders.

Delegates welcomed the Secretariat's proposal to organize regional workshops as part of the consultative process on the development and transfer of technology initiated at COP-4. JAPAN noted the important input the forthcoming IPCC Special Report will make to the process and stressed the need for close coordination between SBSTA and the IPCC. The US, NETHERLANDS, GERMANY, FRANCE, JAPAN and AUSTRALIA announced financial contributions to support the consultative process. THAILAND offered to host a regional workshop. The EU favored a practical sectoral approach for the forthcoming workshops and said they should take stock of existing expertise, technology needs and capacity building. EGYPT emphasized the need to make publicly-owned technology available to developing countries and expressed concern about the limited attention given to adaptation technologies. AUSTRALIA stressed the importance of country-specific market-based approaches, the private sector and the role of the CDM in facilitating technology transfer.

The G-77/CHINA stated that technology transfer could not take place under the market process. He stressed the need to address technology transfer in the broadest sense and incorporate elements of capacity building, public awareness, installation and smooth transfer from the donor to the recipient. He highlighted the need for rules and procedures to govern the transfer of technology, called for an increase in the Secretariat's budgetary allocation to fund capacity building for technology transfer, and suggested creating a permanent mechanism to facilitate technology transfer. The PHILIPPINES, with CAMEROON, said technology transfer should be tackled as a commitment, not as a commercial undertaking. CANADA stated that technology transfer is critical to achieving the long-term goals of the Convention and Protocol. She described the private sector as the main vehicle for the transfer, and said the challenge is to create an enabling environment and implement enabling activities leading to continuous transfer. She



added that investments associated with the CDM and JI mechanisms will be instrumental in transferring efficient and effective climate change technology to non-Annex I Parties and economies in transition.

The Climate Technology Initiative described its work addressing the questions and issues raised by Decision 4/CP.4, through, *inter alia*, regional seminars on technology diffusion in coordination with business partners.

In the conclusions on this agenda item (FCCC/SBSTA/1999/L.10), SBSTA, *inter alia*: endorsed the proposals to organize three regional workshops; requested the Chair, with assistance from the Secretariat, to report to SBSTA-12 on the workshops with a view to taking a decision at COP-6; welcomed offers of financial and/or in-kind support and encouraged other Parties to provide additional contributions for the consultative process; invited Parties to submit views regarding options to accelerate and sustain the development and transfer of coastal adaptation technologies; and encouraged the Secretariat to continue to cooperate with the OECD Development Assistance Committee in improving the availability of climate-relevant data from its reporting system.

RESEARCH AND SYSTEMATIC OBSERVATION

SBSTA considered research and systematic observation on Monday, 31 May, and Tuesday, 1 June. Kirk Dawson, Global Climate Observing System (GCOS), reported on activities undertaken in response to the decisions of SBSTA-9 and COP-4. He stressed the need for, *inter alia*: greater guidance for Parties' submissions on national plans and programmes for systematic observation; long-term funding for ongoing operations; and systems consistent with infrastructural levels in developing countries. He said GCOS was exploring the establishment of an intergovernmental board to provide guidance on addressing priority issues and proposing a series of implementation meetings that could also be used to identify regional scientific policy or funding issues. He called for SBSTA's assistance in mobilizing the necessary resources.

The US expressed concern at the declining state of the global observational network. CANADA, with the EU and RUSSIA, urged support for GCOS. The MARSHALL ISLANDS called for development of national plans to address observational gaps and data deficiencies and for support to strengthen endogenous capacities. Informal consultations, co-chaired by Philip Gwage (Uganda) and Susan Barrell (Australia), were held on this issue. In the conclusions on this agenda item (FCCC/SBSTA/1999/L.2), SBSTA decided to consider, at SBSTA-11, the preliminary draft guidance for reporting on systematic observation prepared by GCOS; invited agencies participating in the Climate Agenda, through the GCOS Secretariat, to report to SBSTA-11 on their further actions and plans; urged Parties to enhance support for capacity building in developing countries to reverse the degradation of their observing capacities; and noted the need for Parties to support research on climate change.

IMPLEMENTATION OF CONVENTION ARTICLES 4.8 AND 4.9 (ADVERSE EFFECTS)

On Friday, 4 June, SBI Vice Chair Mohammed Reza Salamat (Iran) reported on informal consultations conducted on behalf of the SBI and SBSTA Chairs on the terms of reference for an expert workshop envisaged on implementation of Articles 4.8 and 4.9 of the Convention and Articles 2.3 and 3.14 of the Protocol (adverse effects). He said the group reached consensus on the terms of reference (FCCC/SBSTA/1999/CRP.1) that will be annexed to Decision 5/CP.4 that initiated the consultations. The technical workshop, which is scheduled for 22–24 September 1999, will aim to identify: factors that will determine the

adverse effects of climate change and the impacts of implementing response measures; and existing information gaps, needs and views on methodologies. It will further consider the specific needs of the least developed countries, and issues raised in national submissions and communications. He stressed the need for balanced participation in the workshop by developed and developing country experts, in particular from Africa. The G-77/CHINA reserved its right to introduce substantive issues should other Parties do the same. Delegates adopted the terms of reference.

SBSTA FINAL PLENARY

On Friday, 11 June, Parties adopted the draft report of the session (FCCC/SBSTA/1999/L.1). The Rapporteur said an additional paragraph will be added to the final report, stating that the Secretariat will assess its capacity to carry out activities requested in the conclusions on work for the biennium 2000-2001 and will report back to the subsidiary bodies at the next sessions.

FCCC Executive Secretary Zammit Cutajar thanked SBSTA for its work and said it is developing into a repository of competence and expertise that is making good advances. Chair Chow noted that this was the end of his term as SBSTA Chair. He said SBSTA is a body that provides excellent advice to the SBI and the COP and thanked delegates for their efforts and initiative in ensuring that the process has moved forward.

SUBSIDIARY BODY FOR IMPLEMENTATION (SBI)

On Monday, 31 May, SBI Chair Bakary Kante (Senegal) opened the session by introducing the provisional agenda (FCCC/SBI/1999/1) and introduced the new officers, SBI Vice Chair Mohammad Reza Salamat (Iran) and Klaus Radunsky (Austria), Rapporteur. He said that, following consultations with the COP Bureau, the second review of adequacy of commitments would be addressed at COP-5; Turkey's request to be taken out of Annex I would be discussed in the run-up to COP-5; and Kazakhstan's request to amend Annex I would be on the provisional agenda for COP-5.

SBI discussed: Annex I and non-Annex I communications; implementation of FCCC Articles 4.8 and 4.9 (adverse effects); arrangements for intergovernmental meetings; and administrative and financial matters. During the course of the two weeks, contact groups and informal consultations were convened for some agenda items following initial discussion in plenary.

SWITZERLAND stated that while this SBI session should advance as many elements of the Buenos Aires Plan of Action as possible, it should also strive to make progress on implementation of the Convention. He called for a strong and enforceable compliance regime and reliable procedures for verification and certification. CHINA, with the REPUBLIC OF KOREA, said the item on the timing of second non-Annex I communications was premature, as only 11 developing countries had submitted first national communications. He attributed this delay to the GEF. The EU, with the US, said proper consideration of initial national communications should result in improved second national communications.

On implementation of Articles 4.8 and 4.9 (adverse effects), the Chair conveyed the decision of the SBI/SBSTA Chairs to set up a Friends of the Chair group, consisting of the Vice-Chair of SBI, Coordinator of the G-77/China, the EU, countries with economies in transition and JUSCANZ, to finalize the workshop's terms of reference on the issue.



NATIONAL COMMUNICATIONS FROM PARTIES INCLUDED IN ANNEX I TO THE CONVENTION

On Wednesday, 2 June, SBI considered annual GHG inventories from Annex I Parties. The EU called for a single document containing all available data from Annex I Parties and urged Parties that had not done so to submit their inventories. The US underscored the importance of high-quality reports and questioned the delay in submission of Annex I inventories. It was decided that a joint SBSTA/SBI contact group would be convened to consider several relevant documents relating to Annex I communications, including draft conclusions and draft decisions. The contact group held nine meetings during the session.

On Thursday, 10 June, SBI adopted draft conclusions on the elements of national communications by Annex I Parties contained in the SBI agenda, and adopted the draft conclusions on annual inventories of national greenhouse gas data for 1996 (FCCC/SBI/1999/L.5) and the future review process, including that under Protocol Articles 7 and 8 (communication and review of information) (FCCC/SBI/1999/L.7). On FCCC reporting guidelines on projections, policies and measures, financial resources, transfer of technology and other matters, CANADA noted SBSTA's agreement to hold further discussions. Conclusions referred by SBSTA on review processes for GHG inventories of Annex I Parties and a work programme on methodological issues relating to Articles 5, 7 and 8 of the Protocol were adopted.

The conclusions on annual inventories of national greenhouse gas data for 1996 stated, *inter alia*, that the SBI: noted that further efforts are required to ensure adherence to guidelines by Annex I Parties, in particular in the provision of data on LULUCF, and in data on emissions of HFCs, perfluorocarbons (PFCs) and sulphur hexafluoride (SF₆); urged Annex I Parties that had not already done so to submit their annual national greenhouse gas inventories as soon as possible; and noted that the majority of Parties that reported data for 1990-1996 exhibit increasing aggregate greenhouse gas emissions, and, according to available information, will not reduce emissions to 1990 levels by 2000.

On the review process, the SBI conclusions, *inter alia*: noted that consideration of issues related to interim reporting should be postponed until issues relating to Protocol reporting and review had been resolved; expressed concern that only seven in-depth review reports could be published prior to SBI-10; and requested the Secretariat to prepare a report on experiences with the review of second national communications for consideration at SBI-12.

Matters relating to Annex I communications referred by SBSTA were adopted (FCCC/SBI/1999/L.2, L.3, and L.6). On SBSTA's conclusions relating to the technical review process for Annex I GHG inventories, SBI, *inter alia*: agreed on the preliminary elements of a draft decision for consideration by COP-5; decided to consider draft guidelines for technical reviews of greenhouse gas inventories at SBI-11; invited Parties to submit their views on the draft guidelines to the Secretariat by 1 October 1999; and requested the Secretariat to develop a work plan for the technical review process, for the period 2000 to 2002, for consideration at SBI-11.

NON-ANNEX I COMMUNICATIONS

Decisions 10/CP.2 and 12/CP.4 requested the Secretariat, for each SBI session, to: provide details of financial support made available to non-Annex I Parties by the GEF; and facilitate assistance to Parties in preparing their national communications and make available a list of projects submitted by non-Annex I Parties in accordance with FCCC Article 12.4 (financial support for communications).

On Monday, 31 May, in SBI's opening plenary, the EU, with the US, stated that national communications can help identify further means to assist non-Annex I Parties in their efforts to implement Article 12 (communication of information) and indicated the need for a COP decision on the process of consideration before the timing of second national communications is decided.

The US said the revision of guidelines was fundamental to improving second national communications, and proposed expanding the guidelines to provide for, *inter alia*, broader coverage and disaggregation of GHG inventories and information on GHG emissions trends. AUSTRALIA supported revision of guidelines for non-Annex I communications and said the revision should be complete before the lodgement date of second national communications. The REPUBLIC OF KOREA said consideration of non-Annex I Parties' communications should identify their financial and technical difficulties in GHG limitation and should be undertaken when more non-Annex I Party communications are available.

SBI continued discussion of non-Annex I communications in a contact group, co-chaired by Dan Reifsnyder (US) and Paul Maclons (South Africa). On financial and technical support for non-Annex I communications, the Alliance of Small Island States (AOSIS) cautioned against standardizing content requirements for national communications and indicated the benefits of permitting small States to complete national communications on a regional basis. Noting that the GEF had increased funding for non-Annex I communications, the EU said the financial mechanism had responded effectively to developing country needs. The G-77/CHINA called for clear guidance on financial and technical support and said the GEF did not provide adequate funding. BOTSWANA, ZIMBABWE and the CENTRAL AFRICAN REPUBLIC said the preparation of national communications should be an ongoing process and noted that practical difficulties faced by non-Annex I Parties impede the necessary continuity.

On Saturday, 5 June, the group considered a draft decision tabled by the G-77/China on initial and subsequent non-Annex I communications. Delegates focused on a provision establishing a non-Annex I Group of Experts, with a view to enhancing support for preparation of communications, identifying difficulties faced by countries and improving non-Annex I communications. The US inquired how the expert group would feed back into national processes and cautioned against duplication of work. The EU asked about the linkage of the expert group to intergovernmental processes. The group decided to reconvene during the week to continue its discussions and further consider the G-77/China's proposed draft decision.

On Tuesday, 8 June, the contact group met in an evening session and exchanged preliminary views on a draft decision submitted by the EU. The EU said the intent of the decision is to improve the quality of communications and address some of the constraints faced by non-Annex I countries. He underlined learning from experiences gained while preparing initial communications and making progress towards guidelines for non-Annex I second communications as the EU's main concerns. He highlighted the benefit of open, transparent and non-confrontational technical assessment of non-Annex I communications. He indicated that the IPCC Inventory Task Force could be requested to develop a work plan to prepare a comprehensive database on regional emissions factors. The G-77/CHINA pointed to inconsistencies between the draft decision and previous COP decisions on providing guidance to the operating entity of the financial mechanism. She questioned the IPCC's capacity to gather country-specific information. The US said it supported many of the points in the EU's text, particularly on the usefulness of technical feedback and the need to develop guide-



lines for second national communications. TOGO noted that it was premature to think about guidelines for second communications, as most non-Annex I countries were still preparing their first. MEXICO said financial support should be available not only for vulnerability assessment but also for mitigation and adaptation efforts.

On Wednesday, 9 June, the contact group met to discuss proposed draft decisions submitted by the EU and the G-77/CHINA and to decide on how to proceed in preparation for COP-5. Contact Group Co-Chair Reifsnnyder proposed identifying common elements between the two proposals. Many delegations highlighted the differences, including: whether the initial guidelines should be revised for second national communications; whether there should be a technical assessment to "consider" communications; or if a non-Annex I group of experts should provide assistance. Other delegations noted common elements between the proposals on information gaps, GEF enabling activities, and the need to identify problems faced by non-Annex I countries in preparing communications. The group opted for a text "comparing," rather than combining, the two proposals.

On Friday, 11 June, delegates met to consider draft conclusions on aspects of national communications from non-Annex I Parties. On the input from Parties to the GEF review of enabling activities, the PHILIPPINES deleted a reference in the draft conclusions to the scope of enabling activities, including various activities that facilitate the implementation of Convention Articles 4.1 (national inventories) and 12.1 (national communications). In its conclusions (FCCC/SBI/1999/CRP.5), SBI requested: the GEF to include in its annual reports to the COP information about progress made on the GEF review; and the Secretariat to prepare a report on efforts to assist developing countries in the implementation of enabling activities.

On the provision of financial and technical support, delegates adopted conclusions (FCCC/SBI/1999/CRP.5), asking the Secretariat to request the GEF to provide dates of disbursement of funds for enabling-activity projects for preparation of non-Annex I initial national communications. At the request of the PHILIPPINES and the EU, the conclusions accepted continuing consideration of this issue at SBI's next session. The conclusions also suggested that the list of projects submitted by non-Annex I Parties be brought to the attention of the GEF and, "as appropriate," other financing agencies, and required the contact group's Co-Chairs to prepare a framework on elements of a draft decision, based on proposals by the G-77/CHINA and the EU.

On timing for non-Annex I national communications, the SBI considered and adopted draft conclusions (FCCC/SBI/1999/CRP.6) by the Co-Chairs of the contact group, including proposed draft decisions by the G-77/CHINA and the EU as annexes. The EU requested that the annexes reflect the proposals as originally submitted. The conclusions include a provision requesting the Co-Chairs of the contact group to prepare a miscellaneous document providing a framework for comparing the views of the G-77/CHINA and the EU as contained in the annexes. An amendment was proposed by the PHILIPPINES calling for "elements for draft decisions" to be prepared instead. The SBI invited Parties to submit further views and comments by 15 July and decided to continue consideration of the matter at SBI-11, with a view to recommending a decision for adoption by COP-5. The conclusions were adopted as amended.

ARRANGEMENTS FOR INTERGOVERNMENTAL MEETINGS

In an effort to encourage reflection on methods for making the intergovernmental process more effective and efficient, the Secretariat produced a document containing suggestions (FCCC/SBI/1999/2).

On Tuesday, 1 June, Parties exchanged views on COP-5, including: when it should commence; whether a Committee of the Whole (COW) should be created; what form the high-level segment should take; and what dates for COP-6 could be. Several Parties favored establishing a COW as it would benefit small delegations. Stating that COP-5 will be largely a technical meeting, SAUDI ARABIA, with KAZAKHSTAN and CHINA, opposed the creation of a COW. CANADA and SLOVENIA preferred the high-level segment but without formal oral presentations. The EU suggested an informal panel discussion between ministers to enable them to focus on important political issues.

EGYPT proposed grouping controversial issues into clusters and discussing them in workshops before COP-5. SAUDI ARABIA and CHINA cautioned against introducing controversial issues that could "torpedo" the success of COP-5. The NETHERLANDS expressed interest in hosting COP-6. Chair Kante requested the Rapporteur to consult with Parties and find common ground on these issues.

On Monday, 7 June, SBI Rapporteur Klaus Radunsky outlined two alternative proposals on arrangements for COP-5 and noted that, while both scheduled the beginning of the session for 25 October 1999, one entailed a COW while the other excludes it. He said options for the high-level segment were 1-2 November and 4-5 November. On topics for the high-level segment, he stated that two options were being discussed. The first proposed the high-level segment to address, *inter alia*: experiences; key issues; challenges with regard to innovative, efficient and state-of-the-art technologies; policies and measures; and the Protocol mechanisms, as well as ways and means of promoting their development. The second proposed an exchange of views on the short- and long-term development of the Convention and the Protocol, including the implementation of the Buenos Aires Plan of Action.

The G-77/CHINA tabled a draft decision on arrangements for COP-5. He indicated that, *inter alia*: no "contentious" or "extraneous" issues should be included in COP-5's agenda; no COW need be formed; the high-level segment should take place from 3-4 November; and ministers and heads of delegation should participate on an equal footing. He recommended that the high-level segment address the state of implementation of the Buenos Aires Plan of Action and the early entry into force of the Protocol. The EU called for dynamic interaction among heads of delegation during the high-level segment, rather than lengthy statements. The EU, with the US, noted the need for more consultations on arrangements for COP-5. JAPAN accepted most of the G-77/CHINA's suggestions, except on timing for the high-level segment. He emphasized COP-5's role in building momentum towards COP-6.

The NETHERLANDS announced its offer to host COP-6 in the Hague and said Parties should decide whether it should be held in 2000 or 2001. The US noted its preference to hold COP-6 in 2001 in view of the work required to solve pending issues, including the Protocol mechanisms, compliance procedures and LULUCF. He proposed two sessions of the subsidiary bodies to take place between COP-5 and COP-6. AUSTRALIA said that since COP-6 had important decisions to take it should be held early in 2001. CANADA noted the importance of setting the technical foundation of decisions on issues such as technology transfer, the mechanisms and compliance. He said there should be ample opportunities for subsidiary body discussions in 2000, which may affect the dates for COP-6. The G-77/CHINA preferred scheduling COP-6 in October or November 2000, and objected to additional intersessional meetings of the subsidiary bodies. The EU expressed its flexibility on the timing of COP-6 but underscored the need for a



prompt decision to give the Netherlands sufficient time to prepare. Chair Kante asked John Ashe (Antigua and Barbuda) to undertake informal consultations and report back to the SBI.

In SBI's closing plenary session on Friday, 11 June, conclusions (FCCC/SBI/1999/CRP.3) were adopted that: welcomed the nomination of Mr. Jan Szyszko, Minister of Environmental Protection and Natural Resources and Forestry of Poland, by the Group of Eastern European States as President designate of COP-5; recommended that COP-5 begin on 25 October 1999; made arrangements for the high-level segment; welcomed the offer of the Netherlands to host COP-6; and recommended dates for meetings of the subsidiary bodies for the year 2001-2003. The SBI recommended that the COP-5 high-level segment take place on 2-3 November 1999 and the discussion topics be: lessons learned and progress made in dealing with climate change, and promoting implementation of the Buenos Aires Plan of Action and entry into force of the Protocol. The SBI decided to defer discussion on dates for COP-6 and dates for the sessions of the subsidiary bodies in 2000, to its eleventh session.

ADMINISTRATIVE AND FINANCIAL MATTERS

On Wednesday, 2 June, the Executive Secretary introduced the programme budget for the biennium 2000-2001 (FCCC/SBI/1999/Add.1). He highlighted its new features, *inter alia*, a cross-cutting emphasis on capacity building and strong focus on ensuring high quality inventory data. He said the budget also seeks to strengthen capacity within the Secretariat to enable it to respond effectively to Parties' demands. He informed delegates of a 50% increase in the budget for programme activities. The PHILIPPINES stressed that capacity building was for developing countries and not the Secretariat. IRAN, with CHINA, BRAZIL, SAUDI ARABIA, INDIA and the PHILIPPINES, expressed concern at the steep increase in the proposed budget's expenditure levels.

On income and budget performance in the biennium 1998-1999, the EU called for timely payment of contributions. The PHILIPPINES noted that developing countries were penalized for arrears in their contributions by being denied the benefit of the trust fund for participation and inquired whether similar penalties existed for Annex I countries. The EU said options to deal with cash surpluses and carry-over of resources from previous biennium periods required further consideration. SWITZERLAND asked why there were unspent reserves. JAPAN said it preferred repayment to the Parties.

Many delegates did not support the proposed 50% budget increase or the proposed 59% rise in the number of staff. The G-77/CHINA stated that it cannot support the extent of the proposed increase and noted the current trend among many Parties to support zero-growth budgets. He expressed concern that budget proposals anticipated outcomes of COP decisions that had not yet been made. The EU, supported by the US, CANADA and RUSSIA, suggested that the Secretariat prepare other options for a draft budget. He proposed scenarios based on increases of 0%, 5% and 7.5% per annum, and suggested deferring a decision on the budget to COP-5. The US and CANADA preferred resolving the issue at this session, given COP-5's heavy workload.

RUSSIA drew participants' attention to political realities, stating that it would be difficult to justify the request for such a substantial increase in funding from national decision makers. CANADA emphasized that the Secretariat should focus on its facilitative function. IRAN suggested that the Secretariat provide at least two reports on biennium budgets, thus allowing later drafts to take into account additional expenses resulting from COP decisions. He expressed concern over the number of consultants hired and the criteria applied to their

selection. The PHILIPPINES noted that a budget increase did not necessarily benefit the Parties. She said greater South-South coordination on capacity building could take some pressure off the Secretariat.

In reference to certain programme activities outlined in the budget, CHINA stated that the Secretariat was not mandated to provide policy guidance to Parties but rather the other way around. He noted the need for the budget to reflect the prioritization of the CDM. EGYPT suggested streamlining FCCC programme activities in areas covered by other entities. INDIA inquired about the Secretariat's policies on *gratis* personnel and suggested that the Secretariat prepare a table comparing the proposed budget to previous ones.

On contingencies for conference services, the G-77/CHINA said the UN General Assembly should be asked to include the FCCC's requirements in its budget. The US said Parties should pay for conference servicing, and suggested requesting the General Assembly to take a decision on this matter.

The FCCC Executive Secretary referred to the Secretariat's predicament when preparing the budget given that it had not received guidance from Parties. He said this discussion would help remedy the lack of guidance and noted that the proposed budget for the 2000-2001 biennium followed previously-used methodology. He noted difficulties in preparing a table or chart allowing comparisons of activities from biennium to biennium. He emphasized that while delegations did not agree to a 50% budget increase, most had acknowledged the increase in the Secretariat's workload. He suggested delegates consider deferring consideration of anticipated budgetary outcomes on upcoming COP-6 decisions until COP-6.

On the status of carry-overs, the Secretariat indicated that it is assessed on a biannual basis and that the status for 1999 would only be known by the end of the year. The US referred to a budgetary rule that impedes the expenditure of carry-overs from previous period contributions as a "perverse incentive" against timely payment of contributions. The EU said untimely contributions were not the only cause for carry-overs. The Secretariat suggested a COP decision to allow expenditure of carry-overs up to the amount approved by the budget.

The budget contact group, chaired by Mohamed Ould el Ghaouth (Mauritania), met on Wednesday and Thursday, 9-10 June, to continue discussing the proposed SBI conclusions and a draft decision to COP-5 on the programme budget for the biennium 2000-2001. The group also considered two tables. One summarizes the proposed budget for the 2000-2001 biennium amounting to a total of US\$25.277 million. The other outlines the budget for Secretariat staffing. The FCCC Executive Secretary indicated that the proposed budget reduces funds allocated to programme activities in 2000 and increases those available in 2001. He noted that the staffing table reflects a suggested reduction in the staff increase from a total staff of 100 to 81. A group of countries requested that the revised proposed budget reflect the priority to be given to the CDM through inclusion of a separate programme. Several delegations noted the need for more detail on programme activities and staffing in the budget. The group undertook a paragraph-by-paragraph discussion of the proposed SBI conclusions and draft decision. The discussion focused on bracketed text in the draft decision, approving carry-overs to cover part of the budget period and a contingency budget for non-Annex I communications. The group agreed to text approving a draw-down of US\$2 million from the unspent balance or contributions (carry-overs) from the previous biennium to cover part of the 2000-2001 budget. The provision on a contingency budget for non-Annex I communications remained bracketed.



On Friday, 10 June, delegates adopted conclusions (FCCC/SBI/1999/CRP.7) on the programme budget for the biennium 2000-2001. A draft decision recommended by SBI for adoption at COP-5 is annexed to the conclusions. The draft decision includes provisions approving the programme budget for the biennium 2000-2001, amounting to US\$25,286,000. This represents an increase of US\$3,638,200 over the comparable figure in the current biennium 1998-1999, partly to be met by a special drawing of US\$2 million from unspent balances or contributions from previous financial periods. The resulting increase in the total indicative contributions due by Parties over those in the current biennium 1998-1999 would be 10.7%. A provision approving a contingency budget for matters related to the consideration of national communications from non-Annex I Parties, amounting to US\$1,527,900 to be added to the 2000-2001 programme budget, remains bracketed. Annexed to the draft decision are tables specifying: programme and staffing expenditures; resource requirements for contingencies and staffing related to consideration of non-Annex I communications; estimated resource requirements for participation in the FCCC process; and estimated resource requirements for the Trust Fund for Supplementary Activities.

A note (FCCC/SBI/1999/CRP.1) by SBI Chair Kante on possible activities to be covered through supplementary funding was forwarded to COP-5 for consideration. The note outlines an initial list of possible activities to be undertaken through supplementary funding, amounting to US\$5,120,200 for the biennium. The list of activities includes: organization of workshops; production and dissemination of information products; outreach to NGOs; software support for processing inventory data; preparation of the report on implementation; response to requests by Parties for additional activities related to the mechanisms; facilitation of networking among national focal points; cooperation with other UN bodies; and additional support for the FCCC Fellowship Programme.

Referring to the budget increase, as outlined in the recommended draft decision, the Executive Secretary thanked Parties for their readiness to acknowledge the increasing workload of the Secretariat and assured them of the Secretariat's efforts to carefully revise the budgetary implications of any mandated activities.

Many delegations thanked the Secretariat for being so forthcoming with budget-related information requested by Parties during contact group discussions. INDIA, supported by CHINA, expressed his appreciation for the transparency with which the consultations took place and requested more detailed information in time for COP-5 on staffing requirements and the extent of use of consultants from developing countries. JAPAN stated it had diverging views on the use of carry-overs as set out in the draft decision, noted its support for the Secretariat, and said it would not stand in the way of consensus.

INSTITUTIONAL LINKAGE OF THE FCCC SECRETARIAT TO THE UNITED NATIONS

Based on informal consultations, the Secretariat produced a draft decision (FCCC/SBI/CRP.2), which was referred to COP-5 for adoption. The draft decision: recalls Decision 14/CP.1, which sets 31 December 1999 as the final date to review the institutional linkage of the FCCC Secretariat to the United Nations; notes that the institutional linkage is working satisfactorily; invites the UN General Assembly to decide at its 54th session whether to meet the Convention's conference servicing expenses from its regular budget; and decides that the institutional linkage of the Convention to the UN shall continue, subject to review no later than 31 December 2001.

SBI FINAL PLENARY

In its closing plenary on Friday, 11 June, delegates adopted the draft report of the meeting contained in document FCCC/SBI/1999/L.1. Chair Kante informed Parties about his decision to take up a post in UNEP as Director of Policy Development and thanked them for their support during his term as SBI Chair. Several delegations and the Executive Secretary expressed their appreciation for Chair Kante's work and effort.

JOINT SBI/SBSTA SESSIONS

On Tuesday, 1 June, delegates met in a joint SBI/SBSTA session to consider the AIJ pilot phase, procedures and mechanisms relating to compliance under the Kyoto Protocol, and the mechanisms pursuant to Protocol Articles 6 (JI), 12 (CDM) and 17 (emissions trading). SBSTA Chair Chow opened the joint session and invited general statements from delegates.

On compliance under the Protocol, the G-77/CHINA said Annex I Parties' communications should include information on Convention implementation, particularly: policies and measures to modify longer term trends; new and additional financial resources; assistance to meet adaptation costs; technology transfer; and capacity building of developing countries. AOSIS expressed disappointment at the overall increase in Annex I Parties' emissions, and proposed that COP-5 review implementation of Annex I Party commitments. The EU said this meeting could make progress on, *inter alia*: implementation of Annex I Party FCCC commitments; development and transfer of technology; further elaboration of the Protocol mechanisms, giving priority to the CDM; and development of a strong and efficient compliance system. The AFRICAN GROUP emphasized Africa's special needs relating to adaptation to adverse effects, capacity building and technology transfer. He advocated an early start to the CDM.

PROCEDURES AND MECHANISMS RELATING TO COMPLIANCE UNDER THE KYOTO PROTOCOL

On Monday, 31 May, delegates met in informal consultations to exchange views on procedures and mechanisms relating to compliance under the Kyoto Protocol. Delegates were presented with a synthesis of submissions from Australia, Canada, the EU, New Zealand, AOSIS, South Africa and the US (FCCC/SB/1999/MISC.4, Add. 1 and 2, FCCC/SB/1999/CRP.1). At the first session of the Joint Working Group (JWG) on compliance, held on 1 June and co-chaired by Harald Dovland (Norway) and Espen Rønneberg (Marshall Islands), delegates debated the proposed agenda. The G-77/CHINA called for a discussion on the basic principles for a compliance regime, noted a lack of submissions received from developing countries and supported the compilation of views through a questionnaire. The EU said the JWG should identify the compliance-related elements under the Protocol, define the work programme, and identify linkages to other groups. With SWITZERLAND, he called for a draft negotiating text by COP-5. CANADA said the first task is stocktaking of the compliance-related elements and, with NEW ZEALAND and the US, underscored the importance of tracking other groups' work. CLIMATE ACTION NETWORK proposed that Parties request a synthesis of compliance-related work being done in other subsidiary body groups or a workshop that addresses the full range of compliance issues. JAPAN highlighted the importance of examining other multilateral environmental agreements. After extensive debate, Parties deleted an agenda item on objectives and nature and added a new sub-item on "other elements as identified in Decision 8/CP.4 and in the progress of work."



The JWG met five times during the session and discussed: identification of compliance-related elements, including gaps and suitable forums to address them; design of a compliance system; and consequences of non-compliance. The G-77/CHINA indicated that it had not reached a group position on these items. On identification of compliance-related elements and gaps, the US, with CANADA and the EU, indicated the need to differentiate elements from gaps and proposed three categories to identify them: substantive rules; procedures for addressing compliance; and consequences of non-compliance. She noted that gaps were identifiable for procedures and consequences of non-compliance other than for substantive rules. The US also noted the need to link Protocol Articles 5 (methodological issues), 7 (communication of information), 6 (JI), 12 (CDM) and 17 (emissions trading) to compliance because the first two are means to assess conformity with assigned amounts and the last three are means to meet commitments.

On the design of a compliance system, many Parties stressed the system's facilitative and preventative nature. The US emphasized the importance of transparency and, with JAPAN, called for reasonable certainty about the consequences of non-compliance. AUSTRALIA, CANADA and the US called for a regime tailored to the Kyoto Protocol, as it differs from other multilateral environmental agreements. JAPAN said the system may need a short grace period at the end of the commitment period. The EU said the system should apply to all obligations under the Protocol. It could also provide advice to Parties on implementation, prevent disputes, and impose consequences, including sanctions, if appropriate. With NEW ZEALAND, he stressed the importance of due process and allowing the Parties involved to participate fully. IRAN noted that Protocol Article 18 (non-compliance) does not specify any particular articles, but applies to the entire Protocol. He called on the COP to create a specific body for non-compliance and said an expert review team does not have the authority or capacity to determine non-compliance.

On institutional issues, the US noted a number of questions, including: who could trigger the non-compliance mechanism; whether one body would deal with both the facilitative and non-compliance aspects of the process; and whether the body would be composed of Parties or be independent. The EU said compliance processes should: operate through one supervisory body; function through a single set of procedures; and provide for measures that apply in a graduated manner. An independent committee of experts from relevant fields should operate the body. The US said the compliance system would apply to any obligation of the Protocol but not to non-binding obligations. AOSIS cautioned against attempting to differentiate legally binding from non-legally binding obligations, and IRAN underscored the legally-binding character of the Protocol. CHINA said Article 18 (non-compliance) applies to all obligations under the Protocol. AUSTRALIA said a distinction between binding and non-binding aspects would be necessary for practical reasons. AUSTRALIA and JAPAN, opposed by the UNITED ARAB EMIRATES, stressed the benefits of peer reviews, rather than a punitive regime, to enforce obligations.

On consequences of non-compliance, all delegates emphasized the preliminary character of their comments. The EU, supported by JAPAN and AOSIS, noted its preference for a system that combines "hard" and "soft" enforcement measures that are graded according to the gravity of the breach and the nature of the obligation. CANADA referred to procedural steps leading to the application of consequences as an integral part of the compliance system. The US referred to prior agreement and a degree of automatic application as requisites for binding consequences. She drew attention to a provision in the

Protocol (Article 6.1.c) penalizing non-compliance by forbidding a Party to sell emissions reduction units when not in compliance with its obligations under Articles 5 (estimation of net emissions) and 7 (annual GHG inventories). The CENTER FOR INTERNATIONAL ENVIRONMENTAL LAW proposed the use of a compliance fund. If Parties reach the end of a commitment period and find that their emissions, minus removals, exceed their assigned amount, they would be obligated under the Protocol to purchase credits or parts of assigned amount to cover their overage. However, if there are insufficient credits or parts of assigned amount available from the market, the required credits would have to be purchased from the compliance fund, which would invest the money in the highest quality emissions reduction and removal projects.

On Saturday, 5 June, the G-77/CHINA presented its position on compliance to the JWG. She stated that only Parties that are in compliance with their obligations and bound by a compliance regime should be allowed to participate in the Protocol mechanisms. Binding consequences for non-compliance are essential, as they will enhance Parties' collective ability to deter non-compliance. She said it may be desirable to identify cases and/or activities that may constitute non-compliance. She supported an indicative list of non-compliance consequences, depending on the cause, type, degree and frequency of non-compliance, including: appropriate assistance; technical and financial expertise and capacity building; issuing cautions; suspension of rights such as the ability to participate in the Protocol mechanisms; and, penalties, like financial penalties for Annex B Parties. She said financial penalties resulting from a non-compliance procedure should be made available to meet the cost of adaptation. She circulated a list of questions on a compliance system, including, what the principles should be that guide the development of procedures to implement Article 18 of the Protocol and what procedures and mechanisms under Article 18 entail binding consequences.

On Tuesday, 8 June, the Co-Chairs proposed a draft work programme on compliance whereby the JWG invites Parties to make submissions to the Secretariat in response to questions contained in an annex to the proposal. These submissions will be compiled in a miscellaneous document. The JWG also requests the Co-Chairs to produce, for consideration by JWG-2, a synthesis of Parties' proposals. The JWG also agrees that an informal discussion on work under the SBI/SBSTA and experience under other conventions would help Parties better understand the compliance system needed. On the nature and timing of the informal exchange, later referred to as a "workshop," the G-77/CHINA, supported by SAUDI ARABIA and IRAN, preferred holding it after COP-5, but before the subsidiary bodies' 12th sessions (SB-12). She said the discussion should have clearly defined objectives and should not reach conclusions or form the basis for any documents. Participants should primarily be government experts. AOSIS suggested holding the discussions back-to-back with COP-5. The EU, CANADA, the US and AUSTRALIA supported holding it prior to COP-5 in order to better prepare for it. Delegates continued debating the timing of the workshop while discussing the JWG's draft report of the meeting in informal consultations.

On Thursday, 10 June, the JWG adopted the report on its meetings and agreed that the Co-Chairs will organize a workshop in early October 1999. The purpose of the workshop will be to informally exchange views on relevant issues, including experiences under other conventions. The Co-Chairs will make a factual, informal report, with no recommendations, on this workshop. The JWG urged all Parties in a position to facilitate developing country participation to make contributions. The workshop will be open to Parties and observers. The JWG



also agreed that a workshop is needed after COP-5 and between SB-11 and SB-12. Responses to questions on compliance, contained in an annex to the report, are due by 1 August 1999.

In his report back to SBI/SBSTA, JWG Co-Chair Dovland reported that the JWG had noted that the work on compliance is linked to that on Protocol Articles 5 (methodology), 7 (communications), and 8 (review of information). He said the JWG had noted the need for exchange of information with the relevant groups and discussed general issues related to a compliance system, such as its objectives and characteristics. He said the group had adopted a work programme and will consider at the next session submissions by Parties based on questions annexed to the conclusions. He announced that a first workshop to further consider this issue would be held on 6–7 October 1999. He thanked Germany and Austria for their offers to help organize the workshop. Delegates accepted annexing the report of the JWG to the report of the SBI.

ACTIVITIES IMPLEMENTED JOINTLY (AIJ) — ACTIVITIES IMPLEMENTED JOINTLY UNDER THE PILOT PHASE

Delegates considered AIJ under the pilot phase during a joint SBI/SBSTA Plenary on Tuesday, 1 June. The G-77/CHINA and others expressed concern at the lack of regional balance in the distribution of pilot projects and said the AIJ project experience internationally was inadequate for a meaningful review. The AFRICAN GROUP and NORWAY called for capacity building to remedy this, particularly in Africa. SWITZERLAND called for the development of terms of reference for the review of the pilot phase for consideration by COP-5. The US, with JAPAN and GUATEMALA, said experiences gained from AIJ projects could provide valuable lessons for the development of Protocol mechanisms. She noted the need for a smooth transition from the pilot phase to project-based mechanisms. COSTA RICA underscored the role of AIJ projects in its sustainable development agenda, and called on COP-5 to take a definitive decision on AIJ's status. GUATEMALA, with BRAZIL, supported AIJ project eligibility for CDM certification, if the project meets the necessary criteria and, with RUSSIA, called for straightforward guidelines for the certification system. IRAN opposed linking AIJ with the CDM since it does not include a credit element and lacks adequate reference to sustainable development.

Margaret Mukahanana (Zimbabwe) and Jos Delbeke (European Community) conducted informal consultations on this agenda item.

Delegates considered and adopted the draft conclusions on this item (FCCC/SB/1999/L.1) on Friday, 11 June. SBSTA and SBI recognized that the AIJ pilot phase should provide developing countries and those in transition with an opportunity to enhance their capacity building, and give Parties an opportunity to gain experience with AIJ. They agreed that the review of the pilot phase should address, *inter alia*: the geographical distribution of projects, particularly the lack of projects in Africa, and analyze the contributing factors; contribution of projects to capacity building and institutional strengthening of Parties, particularly host country Parties; contribution to host countries' sustainable development needs; assessment of environmental benefits related to mitigation of climate change that would not have occurred in the absence of AIJ and the methods used to measure, monitor and independently verify these emissions; and consideration of costs, including costs of greenhouse gas reductions and transaction costs, and examination of related methodologies. SBSTA and SBI decided to undertake a comprehensive review of the AIJ pilot phase at SB-11 with a view to preparing a recommendation to COP-5 on further steps.

MECHANISMS PURSUANT TO ARTICLES 6 (JOINT IMPLEMENTATION), 12 (CLEAN DEVELOPMENT MECHANISM) AND 17 (EMISSIONS TRADING) OF THE KYOTO PROTOCOL

Delegates discussed issues related to the Protocol mechanisms in a joint SBI/SBSTA contact group chaired by SBSTA Chair Chow. The group was unable to start substantive deliberations until the second week when the G-77/CHINA circulated its position paper. In the substantive discussions, delegates stated their positions and identified points of convergence and divergence on specific elements of the synthesis of proposals by Parties on principles, modalities, rules and guidelines on the CDM, JI and emissions trading (FCCC/SB/1999/INF.2 and Add. 1-3).

In an initial exchange of views during the first joint Plenary session on Tuesday, 1 June, the G-77/CHINA stressed the need to, *inter alia*: begin with formulating principles to guide the methodological and operational process; establish a common understanding of the mechanisms; and ensure that the nature and scope of mechanisms do not perpetuate North-South inequities.

The EU stressed the need to ensure that the mechanisms are supplemental to domestic action and do not undermine commitments under the Protocol. She advocated a properly defined ceiling that will encourage Annex B countries to define strong policies and measures. The US, JAPAN, AUSTRALIA, the RUSSIAN FEDERATION, NORWAY, NEW ZEALAND and CANADA opposed the EU proposal to place caps on the use of the Protocol mechanisms. They said, *inter alia*, that the proposal would re-open the "package" agreed in Kyoto, reduce the flow of new resources to developing countries, impede the cost effectiveness of the mechanisms, hinder wider acceptance of the Protocol by domestic constituencies, and create a double standard by not clarifying how it applies to Protocol Article 4 (EU "bubble"). The AFRICAN GROUP supported setting caps on the use of mechanisms to meet Protocol commitments and said that CDM should avoid replicating the inequitable regional distribution of projects experienced during the AIJ pilot phase. AOSIS said actions under the mechanisms should be supplemental to domestic action and, with SENEGAL, suggested that the mechanisms be guided by principles of equity and transparency.

SWITZERLAND proposed a post-verification system for emissions trading that will allow Parties to trade only the excess of assigned amount units. Supported by KAZAKHSTAN, he proposed that JI begins prior to 2008.

The International Chamber of Commerce reported on a recent CDM workshop held in Dakar, Senegal. The workshop conclusions highlighted, *inter alia*, that: the CDM should act as a catalyst for sustainable development; studies on Protocol mechanisms should be extended to all African countries; a wide spectrum of projects and private sector involvement should be promoted; and capacity building of negotiators, companies, potential certifiers and others involved in the CDM should be encouraged.

On Tuesday, 8 June, the G-77/CHINA introduced its position papers on CDM, JI and emissions trading. Outlining the paper on CDM, the G-77/CHINA highlighted CDM's role in helping developing countries achieve sustainable development and developed countries comply with their QELROs. He stressed the need to decide on principles before addressing methodological issues and suggested creating an adaptation fund. The G-77/CHINA recommended that its paper form the basis for future negotiations. In support, CHINA identified issues missing from the Secretariat's synthesis report but covered in the G-77/China paper, including transparency and climate change effectiveness. He said discussions should focus on the clusters — prin-



ciples, methodologies and institutional issues — recommended in the Buenos Aires Plan of Action. At the Chair's request, however, the Group proceeded to focus discussions on various elements of the synthesis papers on the different mechanisms.

CLEAN DEVELOPMENT MECHANISM: On the objectives, principles and purposes of the CDM, the EU identified convergence on various areas, including cost effectiveness, transparency and equity, and divergence on issues, such as inter-tradeability between the mechanisms. The US identified the areas of convergence as being those that recognize, *inter alia*, private sector participation in the CDM and the need for baseline determination to precede use of the mechanisms. PERU recommended a common baseline for JI and the CDM. She said such an approach would, *inter alia*: provide a simple, transparent and reliable methodology for common baseline application, as the regional average of Annex II in energy and other sectors would constitute the calculation basis; and ensure environmental integrity in emissions reductions.

Regarding legal entities, the EU identified convergence on the involvement of both public and private entities in CDM activities but added that Parties should be responsible for fulfilling their Protocol commitments. She said the COP/MOP should designate operational entities. NORWAY, supported by CANADA, said operational entities were a key element for the CDM's institutional structure. He added that they should be drawn from the private sector and be independent, centralized and accredited by the Executive Board. On project eligibility, the US stressed the need for a comprehensive approach to certification and verification, including options for baselines. The G-77/CHINA said project eligibility is central to the principle, nature and scope of the CDM. NORWAY noted that there was no section on baselines in the synthesis report. The REPUBLIC OF KOREA said project eligibility and baselines are essential in formulating CDM rules. He said eligible projects should demonstrate GHG reduction, and investment, financial and technology additionality.

Regarding the contribution to sustainable development, the G-77/CHINA said the recipient country should be the sole judge of whether a project meets its sustainable development priorities. The EU suggested that non-Annex I Parties confirm in writing how a project will help it achieve sustainable development and stressed that the project activity should be consistent with all international agreements to which the Parties involved belong. CHINA suggested applying a similar condition to the funding country to confirm how the CDM would result in certified emissions reductions (CERs).

On sequestration, the G-77/CHINA said discussions should be avoided until the conclusion of ongoing studies by SBSTA and the IPCC. The EU stated its preference for excluding consideration of sequestration pending a COP decision.

On technology transfer and project financing, the G-77/CHINA highlighted the dimension of additionality, a feature absent in the Chair's draft. He said funding for CDM projects should be additional to GEF, ODA and other developed country financial commitments. The US identified convergence on the CDM's role in facilitating technology transfer.

On complementarity, the G-77/CHINA highlighted the primacy of domestic action and recommended the development of guidelines on complementarity. The EU restated its proposal for a concrete ceiling and the US noted possible divergence on the issue.

Regarding levies, the G-77/CHINA highlighted establishing an adaptation fund. The US questioned how this fund would be managed and its proceeds dispersed. On CERs, the G-77/CHINA suggested discussing them in the context of the CDM's purposes.

On further work on CDM, the G-77/CHINA stressed addressing principles and basic elements that are currently not featured in the synthesis report. The US identified convergence on, *inter alia*, the need for work on baselines and share of proceeds. The EU highlighted monitoring, verification, certification and validation.

In the discussion on capacity building, the G-77/CHINA underscored its significance and, supported by PERU, said capacity building should be incorporated into all CDM projects to enhance endogenous expertise to identify technology needs and capacities for assimilation of technology. He urged attention to the special needs of least developed countries. The PHILIPPINES stressed that capacity-building initiatives should be country-driven and within the intergovernmental process. CHINA said capacity building should be "of, for and in" the developing country. The AFRICAN GROUP underscored the importance of an integrated approach to capacity building and called for guidance from the subsidiary bodies to UN agencies working on such activities. The EU suggested coordinating the various capacity-building initiatives so as to optimize resource use. PERU highlighted the beneficial nature of regional discussions on CDM. SENEGAL suggested involving the financial sector, sensitizing the public and decision makers and training developing country officials.

JOINT IMPLEMENTATION: On the structure, purpose and principles of JI, the G-77/CHINA noted its submission on elements that should be addressed to enable the COP/MOP to elaborate guidelines. They include, *inter alia*, participation of Parties in Article 6 (JI) projects, complementarity, climate change effectiveness, transparency, criteria for project baselines and guidelines for monitoring, verification and reporting. CHINA suggested focusing on cluster issues, including: principles, purpose, nature and scope; methodological issues; and institutional issues. The EU suggested including appendices on technical issues such as baselines and monitoring. SWITZERLAND inquired about a date for early crediting, noting the lack of clarity in the case of JI. The EU stated that there is no provision for it in the Protocol. JAPAN noted convergence on environmental and cost effectiveness, equity and transparency. The US emphasized that JI differed from the CDM, since it does not share the goal of promoting sustainable development.

On Parties participating in JI, the EU said they should have ratified the Protocol and be bound by a compliance regime. On the involvement of legal entities, she noted the impact they may have on a Party's responsibilities under Protocol Article 3 (QELROs).

Regarding project eligibility, the EU identified convergence on a two-step approach in JI, validation before implementation and certification of emissions reductions, and in elements relating to assessment of additionality. However, she noted diverging views on the methodology for determining baselines. JAPAN preferred addressing initiation of JI projects along with project eligibility and said many countries did not concur with the two-step approach. The US underlined the need to ensure environmental additionality of JI projects.

Concerning project monitoring, the EU said participants should provide information on their provisions for systematic, accurate and periodic monitoring and submit the necessary monitoring data to show that the project has resulted in quantifiable and long-term reductions.

On the definition of emissions reduction units (ERUs), the US noted convergence on how to denominate, serialize and track ERUs, and reiterated the need to recognize that procedures used elsewhere may not be appropriate for constructing JI. The US also said the registry was an important element to ensure accurate reporting, tracking, and compliance.



On the relationship of JI to the AIJ pilot phase, the US, supported by the EU, said AIJ activities might be eligible for JI if they fulfill the rules and requirements set for such projects. Regarding supplementarity, the EU restated its proposal for a concrete ceiling on the use of all three mechanisms.

EMISSIONS TRADING: On the objectives, principles and purpose of emissions trading, the G-77/CHINA reiterated the need to address principles and basic elements before dealing with methodological and operational issues. He said environmental integrity must be inherent in the system, which should not freeze or perpetuate existing inequities between Annex B and developing countries. He stressed that the Protocol had not created any right, title or entitlement and said emissions trading should be restricted to excess limitations and reductions additional to a country's commitment. CHINA said the synthesis of proposals on emissions trading contained several extraneous elements, such as competitiveness and market size, and called for a revised synthesis. The PHILIPPINES distinguished emissions trading from other mechanisms and stressed that it did not imply a right to pollute but an obligation to reduce GHGs. The EU identified divergence on interchangeability between CERs and ERUs, and, with JAPAN, noted convergence on cost effectiveness, environmental benefits, equity and transparency. With the G-77/CHINA and the US, the EU said the Protocol did not create property rights, and stated that emissions trading was a way of fulfilling obligations under the Protocol. AOSIS, with the AFRICAN GROUP, highlighted the need for adaptation surcharges to be assessed against all the Protocol mechanisms.

On the definition of units, CANADA noted divergence on the concept of fungibility among the Protocol mechanisms. Regarding the sections on competitiveness, market size and structure, relationship to domestic policies, and liability for sales of non-surplus units, the G-77/CHINA said such headings are not neutral and recommended changing them. CANADA said reference to "competitiveness" should be changed to "access to emissions trading." On market size and structure, the RUSSIAN FEDERATION suggested either defining or deleting the term "hot air" in the text. Regarding levies, the EU noted some divergence regarding liability for sales of non-surplus units.

JOINT CONTACT GROUP CONCLUSIONS: Chair Chow said he would redraft the documents based on Parties' comments, and asked for new submissions to be provided by 1 July 1999. The G-77/China urged a later deadline for submissions. The EU asked for additional time to complete its technical work in producing draft appendices. Chair Chow said he would extend the deadline for the technical submission to 1 August, and would consult with Parties on the suggested 1 July deadline.

On Friday, 11 June, delegates adopted the draft conclusions (FCCC/SB/1999/CRP.4) of the SBI and SBSTA Chairs on the Protocol mechanisms. In these conclusions, SBI and SBSTA invited the Parties to submit further proposals by 31 July on issues raised in the Buenos Aires Plan of Action relating to principles, modalities and guidelines for the mechanisms, and elements to be included in the plan to facilitate capacity building. They requested the Chairs, with the Secretariat, to prepare a revised and consolidated synthesis of proposals taking into account the views and submissions of the Parties.

SBSTA Chair Chow noted that a synthesis document and a miscellaneous document will be prepared, and stated that submissions for further proposals received from Parties before the deadline will be available by 15 September 1999. He added that submissions of a technical nature may be synthesized into a new document or included

together with late submissions in a miscellaneous document. The G-77/CHINA stressed the need to address the principles and basic elements in the structure in order to guide the methodological and institutional aspects of the mechanisms' design.

FINAL JOINT SBI/SBSTA PLENARY

The subsidiary bodies met in a final joint session on Friday, 11 June, to consider the report of the Joint Working Group on procedures and mechanisms relating to compliance, and adopt draft conclusions on AIJ under the pilot phase and the Protocol mechanisms.

The BUSINESS COUNCIL FOR SUSTAINABLE ENERGY discussed the AIJ pilot phase. He stated that the pilot phase has played a valuable role in assisting developed and developing countries to understand project-based approaches and encouraged Parties that have not participated in the pilot phase to do so now. He added that the evaluation of the AIJ pilot phase will be useful in designing the CDM. SBSTA Chair Chow thanked participants and declared the joint meetings of the SBSTA and SBI closed.

A BRIEF ANALYSIS OF THE MEETING: "INVISIBLE BRACKETS" WILL LITTER THE PATH TO COP-6

On the final day of the tenth sessions of the subsidiary bodies, FCCC Executive Secretary Michael Zammit Cutajar drew a useful distinction between those agenda items where consensus exists and constructive technical discussion could proceed and those where Parties remain divided. As if enclosed in "invisible brackets," some issues remain hotly contested, although agreed to in the broad language of the Protocol. These issues, such as land use, land-use change and forestry (LULUCF) and a ceiling on the use of the Protocol mechanisms, contributed to the lack of progress at this meeting and could likely impede future sessions. This analysis will characterize the new post-Kyoto stage of the negotiations, identify some of the subsequent issues regarding the direction of upcoming negotiations, and present an overview of issues within invisible brackets.

WE ARE ALL CHILDREN OF KYOTO NOW

There was a genuine sense of disappointment among negotiators during the first week and a half of the subsidiary bodies' proceedings, stemming largely from the G-77/China's need to take time to complete its internal discussions on issues such as the Protocol mechanisms and compliance. The heavy technical and procedural focus of the agenda was dominated by the schedule set out in the Buenos Aires Plan of Action, which, because of its generous timelines, allows Parties to defer consideration of substantive issues, at least for the time being. This, combined with the efforts of some Parties to postpone contentious issues beyond the upcoming COP, added to a distinct absence of any sense of occasion. Little surprise that SBI Chair Kante described the meetings as "technical" and predicted that COP-5 would see more of the same.

Post-Kyoto negotiations will continue to witness a slowing down in pace for a number of reasons, aside from the need to resolve issues trapped in invisible brackets. First, the new phase in negotiations is undertaking the work of institutionalizing the outcomes from Kyoto, a task that should not be underestimated in its complexity. The workload to tackle the complexity of issues derived from Kyoto Protocol was reflected in discussions on the programme budget for the 2000-2001 biennium. In its original proposal, the Secretariat foresaw a 50% increase with respect to the budget for the previous biennium.



Although Parties did not agree to an increase of this nature, they did acknowledge the added burdens derived from pending Kyoto Protocol issues.

While there will be a temptation to criticize the apparent slowing-down in the pace of developments, it is to be expected and may, in retrospect, come to be viewed as a welcome signal of a routinization of the process. Another reason is that, however effective the negotiating process, progress on design and implementation of far-reaching instruments such as the Kyoto mechanisms should not outpace the ability of those Parties with low capacity to absorb and calculate the likely impact and opportunities for their respective countries and regions. The G-77/China is entitled to argue for all the time it requires to engage effectively in the negotiations, not in the least because their futures and the future of global equity are once more intimately bound up with decision-making in the ecologically-indebted industrialized countries. Finally, the inexorable penetration of the FCCC and Kyoto Protocol's impact on domestic policy and constituencies will influence negotiations, adding new calculations to be taken on board during international negotiations. The upcoming US Presidential election is only one prominent example of the domestic-international interaction that must be factored into the negotiations by all concerned.

NEGOTIATORS ARE ON A STEEP LEARNING CURVE

The climate change negotiations highlight an inevitable tension between a United Nations framework characterized by conventional and well-rehearsed rhetoric and the unprecedented demands placed on the system by the scope of the FCCC and Kyoto Protocol. Sweden's veteran negotiator, Bo Kjellén, rarely misses an opportunity to remind participants that they are engaged in an agenda that must ultimately re-programme the genetic codes of a civilization. Facilitating negotiators on their steep learning curve has been the subject of some discussion, notably the role of the Secretariat. In a departure from tradition, future negotiations on LULUCF will include a workshop as part of the formal subsidiary body deliberations, in response to expressions of frustration that too little time is available for detailed exchanges within the traditional negotiation format. The IPCC will also continue to use the side events at the Subsidiary Bodies' meetings to provide detailed briefings on its work.

PROGRESS REPORT

Progress on key controversial issues such as global participation, mechanisms, land use, land use change and forestry, and national communications proved to be patchy. Substantive discussions were simply put on hold and are unlikely to advance before COP-6.

GLOBAL PARTICIPATION: The over-arching issue of global participation (some speak of "voluntary commitments") remained alive at the subsidiary bodies' meetings and is expected to be the subject of early debate at COP-5. Some of the most interesting debates about global participation took place at two side events, one organized by the World Resources Institute (WRI) and the Stockholm Environment Institute. Argentina's delegation was represented at both and, together with other senior participants in the process, expressed interest in a proposal from WRI to overcome the stalemate created by the timing and nature of the debate on voluntary commitments for non-Annex I countries. WRI believes that the stalemate has developed in part from an assumption that a developing country commitment would take the same basic form as an Annex I commitment, namely a limitation on the absolute level of GHG emissions expressed as a growth cap. An alternative form of participation for developing countries would involve lowering the GHG intensity of their economies rather

than measuring absolute emissions. WRI has pointed out that among developing countries there is no discernible relationship between carbon intensity and level of development.

PROTOCOL MECHANISMS: Controversial debates on mechanisms flared within the G-77/China. The group, though under pressure from the Joint Working Group on mechanisms to resolve its differences and formulate a position, dissolved into persistent regional positions on various aspects of the CDM. The concepts of "unilateral CDMs," "tradeability of CERs," "emissions avoidance" and "adaptation funds" teased the G-77/China negotiators for over a week before they emerged with a document that was skillfully and carefully constructed to be open-ended on most issues. With the benefits from the CDM flowing unevenly to different countries within the G-77/China and the lack of a significant incentive to compromise on national positions, the key issues are yet to be resolved within the G-77/China.

The EU welcomed progress on this issue during the last three days of the meetings and noted that they had moved further forward than initially expected. The EU and the Umbrella Group (a fluid group of non-EU Annex I countries) observed a truce on the hotly disputed question of a ceiling on the use of the mechanisms. For the EU it is a case of "once bitten twice shy" as negotiators, convinced that some weak agreements (e.g., sinks, hot air, extra gases) were allowed to slip through in Kyoto, now proceed with more caution than ever. Added to this is the conventional wisdom that unresolved political differences are so fundamental that a premature debate could "derail the process."

The ceiling and definition of "supplementarity" represent the most obvious examples of issues that remain enclosed in notional brackets. The EU proposed a set of formulae to establish a ceiling. They would, in effect, limit the use of the mechanisms to meeting up to half of the effort required of Annex B Parties and include a degree of flexibility for further use, provided that any additional use is matched by an equivalent domestic effort.

NATIONAL COMMUNICATIONS FROM ANNEX I PARTIES: NGOs have expressed concern about attempts by some Parties to remove or downplay important elements of the guidelines for national reporting given the importance of data for monitoring compliance with the Protocol. The US attempted to remove or shift elsewhere elements of the reporting requirements on "energy intensity per unit of GDP," "emissions per capita" and "GDP per capita."

NATIONAL COMMUNICATIONS FROM NON-ANNEX I PARTIES: While some Parties hoped for more submissions of non-Annex I communications in time for the first synthesis report, non-Annex I Parties were of the view that submission of their national communications is subject to the availability of financial resources and technical support. Thus, timing for non-Annex I communications and advancing towards second guidelines were some of the points of contention. Proposals for technical assessments of these communications to identify information gaps were perceived by some developing countries as attempts to prepare the grounds for new developing country commitments. Proof of diverging views on the future of non-Annex I communications within the Convention, was the inability to agree on a contingency budget for matters related to the consideration of non-Annex I communications.

LAND USE, LAND-USE CHANGE AND FORESTRY: The EU believes it has held the line on the central debate over the work programme on LULUCF. They think the JUSCANZ group attempted to develop a parallel process and speed up the work timetable to preempt the forthcoming IPCC Special Report. At the same time, some JUSCANZ Parties demonstrated a reluctance to provide timely and important data in Protocol Articles 3.3 and 3.4 (QELROs), which



would assist the IPCC in assessing the implications of future decisions on the inclusion of certain activities under the LULUCF provisions. The negotiations therefore seemed to confirm NGO suspicions that methodological debates are being used to erode Annex B commitments. New research from Greenpeace International, issued at the close of the meeting, appears to confirm NGOs' worst suspicions. An updated analysis of the potential loopholes in the Kyoto Protocol ("hot air" and the CDM, proposed additional articles under Article 3.4, forestry activities under Article 3.3) shows that the proposals on the table at Bonn could completely undermine the Protocol's already limited environmental effectiveness. Virtually no action would be needed by Annex B Parties to "meet" the commitments.

HASTENING SLOWLY?

COP-5 will not take place in Jordan, as announced in Buenos Aires. Instead it will take place in Bonn, a modest city of gentle pace and routine. It is an altogether understated location. Yet Bonn will be an appropriate venue for COP-5, which has already been described as essentially another "technical" meeting on the way to the bigger prize of COP-6. COP-5 will set the stage for the further emergence and clarification of political issues and hopefully the final removal of the "invisible brackets" at COP-6. The iron law of negotiation is that minimum levels of "negotiating capital" must be accumulated and reserved until the final round.

THINGS TO LOOK FOR

WORKSHOP ON RENEWABLE ENERGY FOR THE DEVELOPING WORLD: A workshop on "Renewable Energy for the Developing World" will be held from 28 June - 2 July 1999, in Carbondale, Colorado, USA. For more information, contact: Solar Energy International; tel: +1-970-963-8855; fax: +1-970-963-8866; e-mail: sei@solarenergy.org; Internet: <http://www.solarenergy.org/solarck.html>.

AOSIS MEETING ON THE CD : The AOSIS meeting on the CDM will be held from 13-16 July 1999 in Majuro, Marshall Islands. For more information, contact: e-mail: rmiun@aol.com.

AIR POLLUTION CONFERENCE: The International Conference on Modelling, Monitoring and Management of Air Pollution will be held from 27-29 July 1999 in San Francisco, California, USA. For more information, contact: the Conference Secretariat, AIR POLLUTION 99, Wessex Institute of Technology, Ashurst, Southampton, SO40 7AA, UK; tel: +44 (0) 1703 293223; fax: +44 (0) 1703 29285; e-mail: wit@wessex.ac.uk; Internet: <http://www.wessex.ac.uk/>.

INTERNATIONAL SYMPOSIUM ON NON-CO₂ GREENHOUSE GASES: The International Symposium on Non-CO₂ Greenhouse Gases: Scientific Understanding, Control, and Implementation, will be held in Noordwijkerhout, the Netherlands, from 8-10 September 1999. For more information, contact: Symposium Bureau; e-mail: j.vanham@plant.nl; Internet: <http://pubsys.wolters-kluwer.com/MWEB/deelnemers/100007514.html>.

SECOND ANNUAL EARTH TECHNOLOGIES FORUM:

The Second Annual Earth Technologies Forum will be held in Washington, DC, from 27-29 September 1999. For more information, contact: Erika Fischer; tel: +1-703-807-4052; fax: +1-703-243-2874; Internet: <http://www.earthforum.com/>.

INSTITUTE FOR GLOBAL ENVIRONMENTAL STRATEGIES TECHNICAL WORKSHOP ON CDM: This workshop will be held in October 1999 in Hamaya, Japan. For more information, contact: Aki Maruyama, IGES, 1560-39 Kamiyamaguchi, Hayama, Kanagawa, 240-0198, Japan; tel: +81-468-55-3812; e-mail: maruyama@iges.or.jp.

INTERNATIONAL SEMINAR ON KYOTO MECHANISMS BUSINESS OPPORTUNITIES: "Kyoto Mechanisms Business Opportunities: How Much is a Project Worth? Selection, Verification and Certification of Projects," will be held in Basel, Switzerland, from 21-22 October 1999. For more information, contact: Wolfram Kaegi, Institute for Economy and the Environment, University of St. Gallen, Tigerbergstrasse 2, CH—9000 St. Gallen, Switzerland; tel: +41-71-224-2583; fax: +41-71-224-2722; e-mail: Wolfram.Kaegi@unisg.ch; Internet: <http://www.iwoe.unisg.ch/kyoto/>.

FOURTH INTERNATIONAL CONGRESS ON ENERGY, ENVIRONMENT & TECHNOLOGICAL INNOVATION: The 4th International Congress on Energy, Environment & Technological Innovation will be held from 20-24 October 1999 in Rome, Italy. For more information, contact: EETI99, Facolta di Ingegneria, Via Eudossiana 18, 00184 Rome, Italy; fax: +39-6-4883235; Internet: <http://www.ing.ucv.ve/ceait/eeti.htm>.

FCCC FIFTH MEETING OF THE CONFERENCE OF THE PARTIES: COP-5 will be held from 25 October - 5 November 1999 at the Maritim Hotel in Bonn, Germany. The technical workshop on FCCC Article 4.8 and 4.9 (adverse effects) is scheduled for 22-24 September. A workshop on compliance is scheduled from 6-7 October. For more information, contact: the FCCC Secretariat; tel: +49-228-815-1000; fax: +49-228-815-1999; e-mail: secretariat@unfccc.de; Internet: <http://www.unfccc.de/>.

CONVENTION TO COMBAT DESERTIFICATION: COP-3 of the CCD is scheduled to meet in Recife, Brazil, from 15-26 November 1999. For more information, contact: the CCD Secretariat, P.O. Box 260129, D-53153 Bonn, Germany; tel: +49-228-815-2800; fax: +49-228-815-2899; e-mail: secretariat@unccd.de; Internet: <http://www.unccd.de>.

MONTREAL PROTOCOL MEETING OF THE PARTIES: The 11th Meeting of the Parties to the Montreal Protocol will be held in Beijing, China, from 29 November - 3 December 1999. For more information, contact: the Secretariat; tel: +254-2-62-1234; fax: +254-2-62-3601; e-mail: ozoneinfo@unep.org; Internet: <http://www.unep.org/ozone/>.